

IN THE CLAIMS:**Listing of Claims:**

1 Claims 9 - 12 (canceled herein)

1 Claims 14 - 17 (canceled herein)

1 Claims 19 - 20 (canceled herein)

1 Claim 21. (currently proposed amended) ~~The process of Claim 20,~~ A process for controlling the
2 pressure within a semiconductor processing chamber, comprising the steps of:

3 first generating a pressure sensor signal responsive to the pressure in said chamber;

4 second generating a step command signal responsive to said pressure sensor signal and a
5 tool logic signal, said step command signal generating comprising applying a pressure control
6 algorithm to said pressure sensor and tool logic signals;

7 third generating a direction/speed command signal responsive to said step command
8 signal and valve position feedback signal, said direction/speed command signal generating
9 comprising applying a position control algorithm to said step command and valve position
10 feedback signals;

11 actuating said valve responsive to said direction/speed command signal, said
12 actuating comprising moving said valve by operation of a motor drive assembly, said actuating
13 resulting in said valve residing in a position, said valve in fluid communication with said
14 chamber, wherein said valve further comprises a valve stem; and

15 said motor drive assembly comprises a motor drive and reduction gear means, said
16 reduction gear means operatively connected between said motor drive and said valve stem,
17 wherein said motor drive assembly position comprises the rotational position of said reduction
18 gear means;

19 fourth generating another said valve position feedback signal responsive to said position
20 of said valve, said valve position feedback signal comprising data representing the position of
21 said motor drive assembly operatively connected to said valve;

22 first repeating said third generating, said actuating and said fourth generating steps until
23 said motor drive assembly is positioned adequately; and

24 second repeating said first and second generating and said first repeating steps until said
25 pressure is controlled adequately.

1 Claims 22 – 32 (canceled)

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